

PROJECT TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

01330 SUBMITTAL PROCEDURES
01355 ENVIRONMENTAL PROTECTION
01420 SOURCES FOR REFERENCE PUBLICATIONS
01451 CONTRACTOR QUALITY CONTROL

DIVISION 02 - SITE WORK

02481 MAINTENANCE DREDGING

-- End of Project Table of Contents --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01330

SUBMITTAL PROCEDURES

05/02

PART 1 GENERAL

- 1.1 PAYMENT
- 1.2 SUBMITTAL IDENTIFICATION (SD)
- 1.3 SUBMITTAL CLASSIFICATION
 - 1.3.1 Government Approved
 - 1.3.1.1 Designated Reviewers
 - 1.3.2 Information Only
- 1.4 APPROVED SUBMITTALS
- 1.5 DISAPPROVED SUBMITTALS
- 1.6 WITHHOLDING OF PAYMENT

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

- 3.1 GENERAL
- 3.2 SUBMITTAL REGISTER
- 3.3 SCHEDULING
- 3.4 TRANSMITTAL FORM (ENG FORM 4025)
- 3.5 SUBMITTAL PROCEDURES
 - 3.5.1 Procedures
 - 3.5.2 Deviations
- 3.6 CONTROL OF SUBMITTALS
- 3.7 GOVERNMENT APPROVED SUBMITTALS
- 3.8 INFORMATION ONLY SUBMITTALS
- 3.9 RESERVATION OF RIGHTS
- 3.10 STAMPS

-- End of Section Table of Contents --

SECTION 01330

SUBMITTAL PROCEDURES

05/02

PART 1 GENERAL

1.1 PAYMENT

No separate payment will be made for any requirements under this Section and all costs of implementation shall be included in the payment item(s) shown in Section 00010, "SOLICITATION, OFFER AND AWARD (SF 1442) AND BIDDING SCHEDULE."

1.2 SUBMITTAL IDENTIFICATION (SD)

Submittals required are identified by SD numbers and titles as follows:

SD-01, Preconstruction Submittals

SD-11, Closeout Submittals

1.3 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.3.1 Government Approved

Government approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause (Section 00700) entitled "Specifications and Drawings for Construction," they are considered to be "shop drawings."

1.3.1.1 Designated Reviewers

The organization designated to perform the review for approval for items requiring Government approval (G) is identified by acronym in the (f) (CLASSIFICATION/GOVT OR A/E REVWR) column on the SUBMITTAL REGISTER. Following is a list of the acronyms used and their full description:

AOF = The Resident U.S. Army Corps of Engineers Area Office

TSD = Technical Services Division, Design Branch, Buffalo District,
U.S. Army Corps of Engineers

1.3.2 Information Only

All submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.4 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.5 DISAPPROVED SUBMITTALS

When a submittal is returned to the Contractor and marked "DISAPPROVED" or "APPROVED - SUBJECT TO CONDITIONS INDICATED," the Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause (Section 00700) "Changes" shall be given promptly to the Contracting Officer.

1.6 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL

The Contractor shall submit all items listed on the Submittal Register and specified in other sections of these specifications. The Contracting Officer may request submittals in addition to those listed when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Submittals shall be made in the respective number of copies and to the respective address set forth below. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) System Manager and each item shall be stamped, signed, and dated by the CQC System Manager indicating action taken. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the

acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

3.2 SUBMITTAL REGISTER

See list of attachments in Section 00100, "INSTRUCTIONS, CONDITIONS AND NOTICES TO BIDDERS" for Submittal Register, listing items of equipment and materials for which submittals are required by the specifications; this list may not be all inclusive and additional submittals may be required. The Contractor will also be given the Submittal Register on a diskette that also contains instructions on the use of the diskette. Columns "c" through "f" have been completed by the Government; the Contractor shall complete columns "a" and "b" and "g" through "l" and submit the forms (two (2) hard copies plus associated electronic file) to the Contracting Officer for approval within 10 calendar days after Notice to Proceed. The Contractor shall keep this diskette up-to-date and shall submit it to the Government together with the monthly payment request. The approved Submittal Register will become the scheduling document and will be used to control submittals throughout the life of the contract. The Submittal Register and the progress schedules shall be coordinated.

3.3 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 30 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals.

3.4 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025), listed as an attachment in Section 00100, shall be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor, are included in the QCS software that the Contractor may be required to use for this contract, or may be copied from the attached form. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

3.5 SUBMITTAL PROCEDURES

Submittals shall be made as follows:

3.5.1 Procedures

Submittals shall be made as stipulated in paragraph "Contractor Submittal Procedures" of the "SPECIAL CONTRACT REQUIREMENTS" (Section 00800) and as specified herein. Contractor shall forward four (4) copies of each submittal to the Area Office as indicated in Section 00800, clause entitled "Physical Data."

3.5.2 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

3.6 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

3.7 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. The distribution of approved copies will be as specified in the Contract Clause (Section 00700) entitled "Specifications and Drawings for Construction."

3.8 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals.

3.9 RESERVATION OF RIGHTS

The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

3.10 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

CONTRACTOR (Firm Name)
_____ Approved
_____ Approved with corrections as noted on submittal data and/or attached sheets(s).
SIGNATURE: _____
TITLE: _____
DATE: _____

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01355

ENVIRONMENTAL PROTECTION

10/00

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 DEFINITIONS
 - 1.2.1 Environmental Pollution and Damage
 - 1.2.2 Environmental Protection
 - 1.2.3 Contractor Generated Hazardous Waste
- 1.3 GENERAL REQUIREMENTS
- 1.4 SUBCONTRACTORS
- 1.5 PAYMENT
- 1.6 SUBMITTALS
- 1.7 ENVIRONMENTAL PROTECTION PLAN
 - 1.7.1 Compliance
 - 1.7.2 Contents
- 1.8 PRECONSTRUCTION INSPECTION
- 1.9 MEETINGS
- 1.10 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS
- 1.11 NOTIFICATION
- 1.12 LITIGATION

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

- 3.1 ENVIRONMENTAL PERMITS AND LICENSES
- 3.2 CONTRACTOR FACILITIES AND WORK AREAS
- 3.3 PROTECTION OF ENVIRONMENTAL RESOURCES
- 3.4 WATER RESOURCES
 - 3.4.1 Washing and Curing Water
 - 3.4.2 Spillages
 - 3.4.3 Fish and Wildlife
- 3.5 AIR RESOURCES
 - 3.5.1 Particulates
 - 3.5.2 Odors
 - 3.5.3 Sound Intrusions
 - 3.5.4 Hydrocarbons and Carbon Monoxide
- 3.6 CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL
 - 3.6.1 Solid Wastes
 - 3.6.2 Chemicals and Chemical Wastes
 - 3.6.3 Contractor Generated Hazardous Wastes/Excess Hazardous Materials
 - 3.6.4 Fuel and Lubricants
 - 3.6.5 Waste Water

- 3.7 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES
- 3.8 PREVIOUSLY USED EQUIPMENT
- 3.9 MAINTENANCE OF POLLUTION FACILITIES
- 3.10 RESTORATION OF LANDSCAPE DAMAGE
- 3.11 TRAINING OF CONTRACTOR PERSONNEL
- 3.12 QUALITY CONTROL

-- End of Section Table of Contents --

SECTION 01355

ENVIRONMENTAL PROTECTION

10/00

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 279	Standards for the Management of Used Oil
49 CFR 171 - 178	Hazardous Materials Regulations

1.2 DEFINITIONS

1.2.1 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally and/or historically.

1.2.2 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during dredging operations. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2.3 Contractor Generated Hazardous Waste

Contractor generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction.

1.3 GENERAL REQUIREMENTS

The Contractor shall minimize environmental pollution and damage that may occur as the result of dredging operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this contract. The Contractor shall comply with all applicable environmental Federal, State, and local laws and regulations. The Contractor shall be responsible for any delays resulting from failure to comply with environmental laws and regulations.

1.4 SUBCONTRACTORS

The Contractor shall ensure compliance with this Section by subcontractors.

1.5 PAYMENT

No separate payment will be made for work covered under this Section. The Contractor shall be responsible for payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor. All costs associated with this Section shall be included in the payment item(s) shown in Section 00010, "SOLICITATION, OFFER AND AWARD (SF1442) AND BIDDING SCHEDULE." The Contractor shall be responsible for payment of all fines/fees for violation or non-compliance with Federal, State, Regional and local laws and regulations.

1.6 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330, "SUBMITTAL PROCEDURES":

SD-01, Preconstruction Submittals

Environmental Protection Plan; G,TSD

The Contractor shall submit an Environmental Protection Plan within ten (10) days after receipt of the Notice to Proceed.

Preconstruction Inspection

The Contractor shall submit a joint condition inspection report prior to starting any on-site dredging activities.

1.7 ENVIRONMENTAL PROTECTION PLAN

Prior to commencing dredging activities, the Contractor shall submit an Environmental Protection Plan for review and approval by the Contracting Officer. The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during dredging operations. Approval of the Contractor's plan will not relieve the Contractor of responsibility for adequate and continuing control of pollutants and other environmental

protection measures. The Contractor shall utilize the format of the Environmental Protection Plan Template which is included as an attachment to this solicitation. The Environmental Protection Plan shall be current and maintained on-site by the Contractor.

1.7.1 Compliance

No requirement in this Section shall be construed as relieving the Contractor of any applicable Federal, State, and local environmental protection laws and regulations. During construction, the Contractor shall be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

1.7.2 Contents

The Environmental Protection Plan shall include, but shall not be limited to, the following:

- a. Procedures to be implemented to provide the required environmental protection, to comply with the applicable laws and regulations, and to correct pollution due to accident, natural causes, or failure to follow the procedures of the Environmental Protection Plan.
- b. Permit or license and the location of the solid and/or liquid waste disposal area(s).
- c. Drawings showing locations of any proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials.
- d. Description of the Contractor's environmental protection personnel training program.
- e. A list of Federal, State, and local laws, regulations, and permits concerning environmental protection, pollution control and abatement that are applicable to the Contractor's proposed operations and the requirements imposed by those laws, regulations, and permits. Also requirements set forth in the Contract Clauses (Section 00700) titled "Clean Air and Water" and "Permits and Responsibilities."
- f. Methods of protecting surface and ground water during dredging activities.
- g. List of fish and wildlife that requires special attention along with measures for their protection as stated in paragraph "Fish and Wildlife."
- h. Traffic control plans including measures to reduce erosion of temporary roadbeds by dredging traffic, especially during wet weather. Plan shall include measures to minimize the amount of mud transported onto paved public roads by vehicles or runoff. The Contractor shall provide signage meeting the approval of the Contracting Officer and furnish a flag person to control traffic at the entrance road for the duration of the hauling by truck.

i. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas including methods for protection of features to be preserved within authorized work areas like trees, shrubs, vines, grasses and ground cover, landscape features, air and water quality, fish and wildlife, soil, wetlands, historical, archaeological and cultural resources, structures and utilities.

j. Spill Response Plan for each type of contaminant that may be encountered during the course of the work. The plan shall include provisions for immediate notification to the Contracting Officer and other applicable regulatory agencies. The notification shall include a description of the material spilled, quantities, location, time, date, the containment procedures effectuated, and the proposed cleanup procedures. The plan shall list the trigger-point quantity at which each contaminant becomes subject to a mandatory reporting procedure. The plan shall also include provisions for communicating with the press and other governmental agencies having an interest. The names, addresses, telephone numbers and contact persons for each possible point of contact shall be listed in the plan.

k. Environmental monitoring plans for the job site, including land, water, air, and noise monitoring.

l. A recycling and solid waste minimization plan with a list of measures to reduce consumption of energy and natural resources. The plan shall detail the Contractor's actions to comply with and to participate in Federal, State, Regional, and local government sponsored recycling programs to reduce the volume of solid waste at the source.

1.8 PRECONSTRUCTION INSPECTION

Prior to starting any on-site dredging activities, the Contractor and the Contracting Officer shall make a joint condition inspection after which the Contractor shall prepare a brief report indicating on a layout plan the condition of docks/property to be used, confined disposal facility areas, trees, shrubs and grassed areas immediately adjacent to work sites and adjacent to the assigned storage area and access routes as applicable. This report must be signed by both the Contracting Officer and the Contractor upon mutual agreement as to its accuracy and completeness.

1.9 MEETINGS

The Contractor shall meet with representatives of the Contracting Officer to alter the Environmental Protection Plan as needed for compliance with the environmental pollution control program.

1.10 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations, requested by the Contractor, from the drawings, plans and specifications which may have an environmental impact will be subject to approval by the Contracting Officer and may require an extended review, processing, and approval time. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact.

1.11 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental laws or regulations, permits, and other elements of the Contractor's Environmental Protection Plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions. This is in addition to any other actions the Contracting Officer may take under the contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

1.12 LITIGATION

If work is suspended, delayed, or interrupted due to a court order of competent jurisdiction, the Contracting Officer will determine whether the order is due in any part to the acts or omissions of the Contractor, or subcontractors at any tier, not required by the terms of the contract. If it is determined that the order is not due to Contractor's failing, such suspension, delay, or interruption shall be considered as ordered by the Contracting Officer in the administration of the contract under the Contract Clause (Section 00700) titled "Suspension of Work."

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 ENVIRONMENTAL PERMITS AND LICENSES

The Contractor shall obtain all needed permits or licenses with respect to disposal of dredged material outside of the Government-furnished disposal areas. The Contractor shall be responsible for operating within the conditions of the Government-obtained Section 401 State Water Quality Certification, Coastal Management Program requirements, and other environmental approvals. The Government will not obtain any other permits for this project; see Contract Clause (Section 00700) titled "Permits and Responsibilities." The Contractor shall be responsible for implementing the terms and requirements of the appropriate permits as needed and for payment of all fees.

3.2 CONTRACTOR FACILITIES AND WORK AREAS

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings, if required, shall be placed in areas approved by the Contracting Officer. Temporary movement or relocation of Contractor facilities shall be made only upon approval of the Contracting Officer.

3.3 PROTECTION OF ENVIRONMENTAL RESOURCES

The environmental resources within the project boundaries and those affected outside the limits of permanent work under this contract shall be protected during the entire period of the contract. The Contractor shall confine activities to areas defined on the contract drawings and specifications. Environmental protection shall be as stated in the following paragraphs.

3.4 WATER RESOURCES

The Contractor shall keep dredging activities under surveillance, management, and control to prevent pollution of surface and ground waters. Toxic or hazardous chemicals shall not be applied to soil or vegetation when such application may cause contamination of the fresh water reserve. The Contractor shall not create unnecessary turbidity which may degrade water quality or adversely affect aquatic life. All water areas affected by dredging activities shall be monitored by the Contractor. For construction activities immediately adjacent to impaired surface waters, the Contractor shall be capable of quantifying sediment or pollutant loading to that surface water when required by State or Federally issued Clean Water Act permits.

3.4.1 Washing and Curing Water

Waste waters directly derived from dredging activities shall not be allowed to enter water areas unless it meets U.S. Environmental Protection Agency and applicable State water quality criteria. The Contractor shall be responsible for the removal and disposition of waste water, including any filtering, ponding or other treatment.

3.4.2 Spillages

Special measures shall be taken by the Contractor to prevent chemicals, fuels, oils, greases, bituminous materials, ashes, sawdust, waste washings, herbicides and insecticides, rubbish or sewage, and other pollutants from entering public waters.

3.4.3 Fish and Wildlife

The Contractor shall keep dredging operations under surveillance, management, and control, to minimize interference with, disturbance to, and damage of fish and wildlife. The Contractor shall not be permitted to disturb native habitat either in, or adjacent to the project area which, in the opinion of the Contracting Officer, are critical to fish and wildlife. Species that require specific attention along with measures for their protection shall be listed by the Contractor prior to beginning of dredging operations.

3.5 AIR RESOURCES

The Contractor shall keep dredging operations under surveillance, management, and control, to minimize pollution of air resources. All activities, equipment, processes, and work performed by the Contractor in accomplishing the specified dredging shall be in accordance with the State laws and all Federal emission and performance laws and standards. Ambient Air Quality Standards set by the U.S. Environmental Protection Agency shall

be maintained. Monitoring of air quality shall be the Contractor's responsibility. All air areas affected by the dredging activities shall be monitored by the Contractor. Monitoring results will be periodically reviewed by the Government to ensure compliance. Special management techniques, as set out below, shall be implemented to control air pollution by the dredging activities under this contract.

3.5.1 Particulates

Dust particles; aerosols and gaseous by-products from dredging activities shall be controlled at all times, including weekends, holidays and hours when work is not in progress. The Contractor shall maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, and other work areas within or outside the project boundaries free from particulates which would cause the Federal, State, and local air pollution standards to be exceeded or which would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, baghouse, scrubbers, electrostatic precipitators or other methods will be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp at all times. The Contractor must have sufficient, competent equipment available to accomplish these tasks. Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs. The Contractor shall comply with all State and local visibility regulations.

3.5.2 Odors

Odors from dredging activities shall be controlled at all times. The odors shall not cause a health hazard and shall be in compliance with State regulations and/or local ordinances.

3.5.3 Sound Intrusions

The Contractor shall keep dredging activities under surveillance and control to minimize environment damage by noise. Methods and devices to control noise emitted by equipment shall be utilized.

3.5.4 Hydrocarbons and Carbon Monoxide

Hydrocarbons and carbon monoxide emissions from equipment shall be controlled to Federal and State allowable limits at all times.

3.6 CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL

Disposal of any materials, waste, effluents, trash, garbage, unsatisfactory excavated materials, oil, grease, chemicals, etc., in areas adjacent to streams, rivers, or lakes and in areas not authorized for waste disposal will not be permitted. If any waste material is dumped in unauthorized areas, the Contractor shall remove the material and restore the area to the condition of the adjacent undisturbed area. If necessary, ground which has become contaminated through the fault or negligence of the Contractor shall be excavated, disposed of as directed by the Contracting Officer, and replaced with suitable fill material, compacted and finished with topsoil and planted as required to re-establish vegetation, all at the expense of the Contractor. Disposal of waste, trash and other materials off the project site shall be in accordance with all applicable Federal, State and

local laws and requirements. Disposal of wastes shall be as directed below, unless otherwise specified in other sections and/or shown on the drawings.

3.6.1 Solid Wastes

Solid wastes shall be placed in containers which are emptied on a regular schedule. Handling, storage, and disposal shall be conducted to prevent contamination. Segregation measures shall be employed so that no hazardous or toxic waste will become co-mingled with solid waste. The Contractor shall transport solid waste from the work area and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal. A Subtitle D RCRA permitted landfill shall be the minimum acceptable off-site solid waste disposal option. The Contractor shall verify that the selected transporters and disposal facilities have the necessary permits and licenses to operate. The Contractor shall comply with Federal, State, and local laws and regulations pertaining to the use of landfill areas.

3.6.2 Chemicals and Chemical Wastes

Chemicals shall be dispensed ensuring no spillage to the ground or water. Periodic inspections of dispensing areas to identify leakage and initiate corrective action shall be performed and documented. This documentation will be periodically reviewed by the Government. Chemical waste shall be collected in labeled corrosion resistant, compatible containers. Collection drums shall be monitored and removed to a staging or storage area when contents are within 6 inches of the top. Wastes shall be classified, managed, stored, and disposed of in accordance with Federal, State, and local laws and regulations.

3.6.3 Contractor Generated Hazardous Wastes/Excess Hazardous Materials

Hazardous wastes are defined in 40 CFR 261, or are as defined by applicable State and local regulations. Hazardous materials are defined in 49 CFR 171 - 178. The Contractor shall, at a minimum, manage and store hazardous waste in compliance with 40 CFR 262. The Contractor shall take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing. The Contractor shall segregate hazardous waste from other materials and wastes, shall protect it from the weather by placing it in a safe covered location, and shall take precautionary measures such as berming or other appropriate measures against accidental spillage. The Contractor shall be responsible for storage, describing, packaging, labeling, marking, and placarding of hazardous waste and hazardous material in accordance with 49 CFR 171 - 178, State, and local laws and regulations. The Contractor shall transport Contractor generated hazardous waste off the work site within 60 days in accordance with the Environmental Protection Agency and the Department of Transportation laws and regulations. The Contractor shall dispose of hazardous waste in compliance with Federal, State and local laws and regulations. Spills of hazardous or toxic materials shall be immediately reported to the Contracting Officer. Cleanup and cleanup costs due to spills shall be the Contractor's responsibility. The disposition of Contractor generated hazardous waste and excess hazardous materials are the Contractor's responsibility.

3.6.4 Fuel and Lubricants

Storage, fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill and evaporation. Fuel, lubricants and oil shall be managed and stored in accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations. There shall be no storage of fuel on the project site. Fuel must be brought to the project site each day that work is performed.

3.6.5 Waste Water

Waste water from dredging shall not be allowed to enter water ways or to be discharged prior to being treated to remove pollutants. Dredging related waste water shall be disposed of off-Government property in accordance with all Federal, State, Regional and local laws and regulations.

3.7 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Existing historical, archaeological, and cultural resources within the Contractor's work area will be so designated by the Contracting Officer if any has been identified. The Contractor shall take precautions to preserve all such resources as they existed at the time they were first pointed out. The Contractor shall provide and install protection for these resources and be responsible for their preservation during the life of the contract. If during excavation or other dredging activities any previously unidentified or unanticipated resources are discovered or found, all activities that may damage or alter such resources shall be temporarily suspended. Resources covered by this paragraph include but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rocks or coral alignments, pavings, wall, or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, the Contractor shall immediately notify the Contracting Officer. While waiting for instructions the Contractor shall record, report, and preserve the finds in accordance with Section 00700, CONTRACT CLAUSE entitled "DIFFERING SITE CONDITIONS."

3.8 PREVIOUSLY USED EQUIPMENT

The Contractor shall thoroughly clean all previously used dredging equipment prior to bringing it into the work area. The Contractor shall ensure that the equipment is free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds. The Contractor shall consult with the USDA jurisdictional office for additional cleaning requirements.

3.9 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time dredging activities create the particular pollutant.

3.10 RESTORATION OF LANDSCAPE DAMAGE

The Contractor shall restore landscape features damaged or destroyed during dredging operations inside and outside the limits of the approved work areas.

3.11 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel shall be trained in all phases of environmental protection. The training shall include methods of detecting and avoiding pollution, familiarization with pollution standards, both statutory and contractual, and installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental pollution control.

3.12 QUALITY CONTROL

The Contractor shall establish and maintain quality control, according to the provisions of Section 01451, "CONTRACTOR QUALITY CONTROL" for environmental protection of all items set forth herein. The Contractor shall record on daily reports, any problems in complying with laws, regulations and ordinances, and any corrective action taken.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01420

SOURCES FOR REFERENCE PUBLICATIONS

03/03

PART 1 GENERAL

1.1 REFERENCES

1.2 ORDERING INFORMATION

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section Table of Contents --

SECTION 01420

SOURCES FOR REFERENCE PUBLICATIONS

03/03

PART 1 GENERAL

1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the standards producing organization, (e.g. ASTM B 564 Nickel Alloy Forgings). However, when the standards producing organization has not assigned a number to a document, an identifying number has been assigned for reference purposes.

1.2 ORDERING INFORMATION

The addresses of the standards publishing organizations whose documents are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the standards producing organization should be ordered from the source by title rather than by number.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01451

CONTRACTOR QUALITY CONTROL

04/97

PART 1 GENERAL

1.1 SUBMITTALS

1.2 PAYMENT

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

3.2 CONTRACTOR QUALITY CONTROL PLAN

3.2.1 Content of the CQC Plan

3.2.2 Acceptance of Plan

3.2.3 Notification of Changes

3.3 COORDINATION MEETING

3.4 QUALITY CONTROL ORGANIZATION

3.4.1 Personnel Requirements

3.4.2 CQC System Manager

3.4.3 Additional Requirement

3.4.4 Organizational Changes

3.5 SUBMITTALS

3.6 CONTROL

3.6.1 Preparatory Phase

3.6.2 Initial Phase

3.6.3 Follow-up Phase

3.6.4 Additional Preparatory and Initial Phases

3.7 COMPLETION INSPECTION

3.7.1 Punch-Out Inspection

3.7.2 Final Acceptance Inspection

3.8 DOCUMENTATION

3.9 SAMPLE FORMS

3.10 NOTIFICATION OF NONCOMPLIANCE

-- End of Section Table of Contents --

SECTION 01451

CONTRACTOR QUALITY CONTROL

04/97

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330, "SUBMITTAL PROCEDURES":

SD-01, Preconstruction Submittals

Contractor Quality Control Plan; G,AOF

The Contractor shall furnish for review by the Government, not later than ten (10) days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of Section 00700, CONTRACT CLAUSES, clause entitled "Inspection of Construction."

Contractor Quality Control Plan Checklist; G,AOF

Along with the CQC Plan, the Contractor shall complete the Contractor Quality Control Plan Checklist included as an attachment to this solicitation.

1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause (Section 00700) titled "Inspection of Construction." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all dredging operations, both on-site and off-site, and shall be keyed to the proposed dredging sequence. The project superintendent will be held responsible for the quality of work on

the job and is subject to removal by the Contracting Officer for non-compliance with the quality requirements specified in the contract. The project superintendent in this context shall be the highest level manager responsible for the overall dredging activities at the site, including quality and production. The project superintendent shall maintain a physical presence at the site at all times, except as otherwise acceptable to the Contracting Officer, and shall be responsible for all dredging and dredging related activities at the site.

3.2 CONTRACTOR QUALITY CONTROL PLAN

The CQC Plan shall identify personnel, procedures, control, instructions, tests, records, and forms to be used. The Contractor shall utilize the format of the Contractor Quality Control Plan Template which is included as an attachment to this solicitation. The Government will consider an interim plan for the first fifteen (15) days of operation. Dredging will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started. Along with the CQC Plan, the Contractor shall complete the Contractor Quality Control Plan Checklist included as an attachment to this solicitation.

3.2.1 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all dredging operations, both on-site and off-site, including work by subcontractors, fabricators, suppliers, and purchasing agents:

- a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three-phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to the project superintendent.
- b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
- c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Government.
- d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, off-site fabricators, suppliers, and purchasing agents. These procedures shall be in accordance with Section 01330, "SUBMITTAL PROCEDURES."

- e. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.
- f. Procedures for tracking dredging deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.
- g. Reporting procedures, including proposed reporting formats.
- h. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable feature under a particular section. This list will be agreed upon during the coordination meeting.

3.2.2 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of dredging. Acceptance is conditional and will be predicated on satisfactory performance during the dredging. The Government reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

3.2.3 Notification of Changes

After acceptance of the CQC Plan, the Contractor shall notify the Contracting Officer in writing a minimum of seven (7) calendar days prior to any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

3.3 COORDINATION MEETING

After the Preconstruction Conference, before start of dredging, and prior to acceptance by the Government of the CQC Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. The CQC Plan shall be submitted for review a minimum of five (5) calendar days prior to the Coordination Meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both on-site and off-site work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting will be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

3.4 QUALITY CONTROL ORGANIZATION

3.4.1 Personnel Requirements

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure safety and contract compliance. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization. The Contractor's CQC staff shall maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff shall be subject to acceptance by the Contracting Officer. The Contractor shall provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Complete records of all letters, material submittals, shop drawing submittals, schedules and all other project documentation shall be promptly furnished to the CQC organization by the Contractor. The CQC organization shall be responsible to maintain these documents and records at the site at all times, except as otherwise acceptable to the Contracting Officer.

3.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the on-site work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager shall be a graduate engineer or a graduate of construction management, with a minimum of 1 year of dredging experience on dredging projects similar to this contract or an experienced dredging person with a minimum of 3 years experience in related work. This CQC System Manager shall be on the site at all times during dredging and shall be employed by the prime Contractor. The CQC System Manager shall be assigned as System Manager but may have duties as Project Superintendent in addition to quality control. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

3.4.3 Additional Requirement

In addition to the above experience and/or education requirements, if the contract exceeds \$1 million, the CQC System Manager shall have completed the course entitled "Construction Quality Management For Contractors". This course is periodically offered and arrangements for attendance can be made with the U.S. Army Engineer District, Buffalo; Technical Services Division.

3.4.4 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

3.5 SUBMITTALS

Submittals shall be made as specified in Section 01330, "SUBMITTAL PROCEDURES." The CQC organization shall be responsible for certifying that all submittals are in compliance with the contract requirements.

3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the dredging activities, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of work as follows:

3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents are approved/accepted, and after copies are at the work site. This phase shall include:

- a. A review of each paragraph of applicable specifications, reference codes, and standards. A copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field shall be made available by the Contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by Government personnel until final acceptance of the work.
- b. A review of the contract drawings.
- c. A check to assure that all plans and/or equipment have been submitted and approved.
- d. Review of provisions that have been made to provide required control inspection and testing.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- f. A physical examination of required materials and equipment to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.
- g. A review of the appropriate activity hazard analysis to assure safety requirements are met.
- h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document dredging tolerances and workmanship standards for that feature of work.
- i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.
- j. Discussion of the initial control phase.

- k. The Government shall be notified at least twenty-four (24) hours in advance of beginning the preparatory control phase. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the daily CQC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- a. A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.
- c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards.
- d. Resolve all differences.
- e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
- f. The Government shall be notified at least twenty four (24) hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the daily CQC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.
- g. The initial phase should be repeated for each new crew to work on-site, or any time acceptable specified quality standards are not being met.

3.6.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not conceal non-conforming work.

3.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if: the quality of on-going work is unacceptable; if there are changes in the applicable CQC staff, on-site production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.

3.7 COMPLETION INSPECTION

3.7.1 Punch-Out Inspection

Near the end of the work, or any increment of the work established by a time stated in the paragraph, "Commencement, Prosecution, and Completion of Work" of Section 00800, "SPECIAL CONTRACT REQUIREMENTS," or stated elsewhere in the specifications, the CQC Manager shall conduct an inspection of the work. A punch list of items which do not conform to the approved drawings and specifications shall be prepared and included in the CQC documentation, as required by paragraph "DOCUMENTATION." The list of deficiencies shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the project is ready for the Government Final Inspection.

3.7.2 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at the final acceptance inspection. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the final sounding surveys. Notice shall be given to the Contracting Officer at least 14 days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause (Section 00700) titled "Inspection of Construction".

3.8 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.

- c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number. As work under this contract proceeds, the contractor shall keep a record of specific information about the dredging operations. This record shall list the date, time, station, cut or offset distance, the load number, an estimate of the material in the scow at that time, and a note field. A new line in this record shall be completed at the beginning of each shift, the end of each shift, when a scow is filled, when a new scow is brought in, and whenever there is a break or change in the location of the cut or a delay greater than 15 minutes. The note field shall be used to record the event (from those listed in the previous sentence) which triggered the entry of the information.
- d. Control activities performed with results and references to specifications/drawings requirements. The control phase shall be identified (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.
- e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- f. Submittals reviewed, with contract reference, by whom, and action taken.
- g. Off-site surveillance activities, including actions taken.
- h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- i. Instructions given/received and conflicts in plans and/or specifications.
- j. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within twenty four (24) hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

3.9 SAMPLE FORMS

Sample forms are listed as attachments in Section 00100, "INSTRUCTIONS, CONDITIONS, AND NOTICES TO BIDDERS."

3.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02481

MAINTENANCE DREDGING

12/02

PART 1 GENERAL

- 1.1 SUBMITTALS
- 1.2 MEASUREMENT AND PAYMENT
 - 1.2.1 General
 - 1.2.2 In-place Payment Quantities
 - 1.2.3 Acceptance Section Lengths
 - 1.2.4 Quantity Determination
 - 1.2.5 Completion of Work
- 1.3 DESCRIPTION
- 1.4 COORDINATION
- 1.5 DATUM AND BENCH MARKS

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

- 3.1 SPECIAL INSTRUCTIONS
 - 3.1.1 Specific Areas and Periods
 - 3.1.2 Notification
 - 3.1.3 Restriction
 - 3.1.4 Order of Work
- 3.2 CHARACTER OF MATERIAL
- 3.3 DISPOSAL OF DREDGED MATERIALS
 - 3.3.1 General
 - 3.3.2 Disposal in Government-furnished Disposal Area (Required method if bid award is based upon Bidding Schedule "A"))
 - 3.3.2.1 Confined Disposal Facility (CDF) Disposal
 - 3.3.2.2 Open-Lake Disposal
 - 3.3.2.3 Nearshore Disposal
 - 3.3.3 Disposal in Contractor-furnished Disposal Area, With Bid (Required method if bid is awarded under Bidding Schedule "B"))
 - 3.3.3.1 Required Documents
 - 3.3.3.2 Required Forms
 - 3.3.3.3 Coordination with Agencies
 - 3.3.3.4 Material Placement Restrictions
 - 3.3.4 Disposal in Contractor-furnished Disposal Area, After Award
 - 3.3.5 Other Removed Materials
 - 3.3.6 Misplaced Materials
 - 3.3.7 Condition of Scows, Hoppers, and Pipelines
 - 3.3.8 Unloading of Scows

3.4 ALLOWANCES AND TOLERANCES

3.4.1 Overdepth

3.4.2 Excessive Dredging

3.4.3 Sideslopes

3.4.4 Shoal Removal

3.5 DREDGING METHODS

3.6 LAYOUT OF WORK

-- End of Section Table of Contents --

SECTION 02481

MAINTENANCE DREDGING

12/02

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330, "SUBMITTAL PROCEDURES":

SD-01, Preconstruction Submittals

Conveyance Method; G,AOF

Methods, equipment, and layout of operations, and sequence of placement of dredged material in the Government-furnished Confined Disposal Facility (CDF), prior to the placement of any dredged material. This submittal is only applicable for projects where CDF disposal is used.

Contractor-Furnished Disposal Area; G,TSD

Statements and permits indicating suitability of Contractor-furnished disposal area(s). This submittal is only applicable for projects using Contractor-furnished disposal area(s).

SD-11, Closeout Submittals

Material Disposal Records

Records indicating quantity and location of dredged material placement in the Government-furnished open-lake and nearshore disposal area(s). This submittal is only applicable for projects where open-lake or nearshore disposal is used.

1.2 MEASUREMENT AND PAYMENT

1.2.1 General

All costs of implementation shall be included in the payment item(s) shown in Section 00010, Solicitation, Offer and Award (SF 1442) and Bidding Schedule. The material to be paid for will be measured by computing the in-place quantity (cubic yards) available within the maximum pay prism (as stated in paragraph "Specific Areas" of this Section), as determined from the "before" soundings, less the quantity remaining within the maximum pay

prism as determined from the "after" soundings, less any deductions that may be required for misplaced material (described in paragraph "Misplaced Materials" of this Section). No payment will be made for quantities that exceed the maximum quantity limits established by the Contracting Officer. The "after" sounding survey will be made within fourteen (14) calendar days after each acceptance section has been completed. All soundings for measurement purposes will be performed in accordance with the Special Contract Requirements (Section 00800), clause "Quantity Surveys" and paragraph "Quantity Determination" of this Section. Payment will be made at the unit price per cubic yard for dredging, which price shall include all costs for labor and equipment for excavation, transporting, and disposal of material specified herein and as shown on the contract drawings.

1.2.2 In-place Payment Quantities

In-place payment quantities will be computed by the Government using channel limits, or other dredging limits established by the Contracting Officer, and stationing as computed by the Government. It is the responsibility of the Contractor to compute and verify such limits and quantities before the commencement of dredging. The Contractor will be furnished drawings depicting both the "before" and "after" dredging soundings along with computer printouts of the soundings if done by the electronic measuring system, or copies of the original field notes if done by conventional methods. Determination of the final quantities will be based on the original (before contract dredging) surveys and on the surveys made for Contract Clause (Section 00700) "Final Examination and Acceptance." The total quantities to be paid for under this contract will be that quantity of dredged material removed from within the maximum pay prism, shown on the contract drawing, and disposed of in accordance with the provisions of these specifications, that do not exceed the total quantities established by the Contracting Officer pursuant to paragraph "Specific Areas and Periods" of this Section. The method used to calculate quantities will be software from Coastal Oceanographics, Inc., either the standard HYPACK method or the TIN method as determined prior to taking the "before" soundings.

1.2.3 Acceptance Section Lengths

The Government will make a final examination and acceptance as specified in Contract Clause (Section 00700) "Final Examination and Acceptance." Examination for acceptance will not be performed until all dredging required under this contract, within 500 feet of the acceptance section, has been completed, or to a point where, in the judgement of the Contracting Officer, further dredging in the contract area will not cause shoaling or damage to the acceptance section. Unless specifically designated in the Special Contract Requirements (Section 00800), clause "Physical Data," acceptance section lengths for hydraulic dredges with a cutterhead and mechanical dredges will be a minimum 2,500 feet. Acceptance section lengths for hopper dredges will be a minimum of 5,000 feet. The acceptance section lengths will be determined by the Contracting Officer prior to the commencement of dredging.

1.2.4 Quantity Determination

Original and final surveys performed by the Government for purposes of acceptance and determining excess quantities will be made using a standard

8-pound sounding lead or basket with tagline, or an electronic fathometer (single and/or multibeam), as determined by the Government. The method used to obtain the original (before contract dredging) survey shall also be used to obtain the final (after contract dredging) survey. Soundings are normally taken at 20-foot intervals no greater than 20 feet along lines equivalent to 100 foot or less stationing, as calculated by standard HYPACK software, from Coastal Oceanographics, Inc.

1.2.5 Completion of Work

The Contractor shall notify the Contracting Officer seven (7) working days prior to completion of each specified acceptance section to allow adequate time for the scheduling of a survey crew to perform examination soundings. Written notification may be required at the discretion of the Contracting Officer. If completion of the acceptance section is not proceeding as anticipated, the Contractor shall notify the Contracting Officer at least two (2) working days prior to the anticipated completion date so that the Government survey crew is not dispatched to perform the examination soundings and so that a revised date can be established. Costs incurred by the Government resulting from failure of the Contractor to appropriately notify the Contracting Officer shall be borne by the Contractor, similar to the "before" dredging survey provisions described in the Special Contract Requirements (Section 00800), clause "Quantity Survey Scheduling".

1.3 DESCRIPTION

The work under this Section includes removal and disposal of material, whether natural or man-made, from within the dredging limits of the Federal navigational channel as shown on the contract drawing.

1.4 COORDINATION

The Contractor, pursuant to Contract Clause (Section 00700) "Other Contracts," shall coordinate his efforts with any other Contractors or Government plant that may be using either the work or disposal areas to avoid any interference in work schedules.

1.5 DATUM AND BENCH MARKS

The plane of reference of low water datum as used in these specifications is that determined by the bench marks listed in the Special Contract Requirements, clause "Physical Data."

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 SPECIAL INSTRUCTIONS

3.1.1 Specific Areas and Periods

The specific areas, between the upper and lower limits of dredging, where the Contractor shall be directed and required to remove shoals will be determined by the Contracting Officer from surveys made by the Government indicating the condition of the channels prior to dredging operations. The Contracting Officer will designate the actual areas and the sequence of the

areas to be dredged from the above surveys. The Contracting Officer may limit the channel width to be dredged and the quantity of material to be dredged from any or all of these specified areas to control the payment quantity. As part of the Contractor's Quality Control system, the Contractor is required to monitor his removal operations to assure that the final total quantity specified by the contract is not exceeded. Material dredged beyond the contract quantity will not be paid for.

3.1.2 Notification

As indicated in the Special Contract Requirements (Section 00800) clause "Physical Data," the Contractor shall notify the regional Coast Guard District, at least two (2) weeks prior to commencement of dredging, concerning the presence of Coast Guard-owned cables and the necessary action and coordination to prevent cable damage, and any other applicable entities specified.

3.1.3 Restriction

The Contractor shall not dredge below a grade three (3) feet above pipes, cables, tunnels, and other submerged crossings shown on the contract drawings or indicated in these specifications (see Special Contract Requirements (Section 00800) clauses "Drawings, Maps, and Specifications" and "Physical Data"). This restriction applies for a distance of twenty-five (25) feet upstream and twenty-five (25) feet downstream of each channel crossing. Any existing crossing that is damaged due to Contractor operations shall be repaired by the Contractor at his expense.

3.1.4 Order of Work

The order of work for dredging shall be as specified in the Special Contract Requirements (Section 00800), clause "Physical Data."

3.2 CHARACTER OF MATERIAL

The material to be removed is composed of silt, sand, and other soil sediments that have been deposited in shoals since the channels were last dredged. Included for removal from all portions of the channels may be items such as boulders, tree trunks, dock timbers, automobiles, old piling, and similar materials.

3.3 DISPOSAL OF DREDGED MATERIALS

3.3.1 General

The material dredged shall be transported and placed in the Government-furnished disposal area(s) as shown on the contract drawing(s), and/or in an authorized Contractor-furnished disposal area(s). All nautical vessels, pipelines, and land-based transport and conveyance systems shall be operated, loaded and unloaded in such a manner as to prevent overflow, spills, leaks, waste, or other loss of any dredged material between point of pickup and point of deposition within the disposal area(s). Hauling vessels shall have sufficient sidewall height and integrity to prevent drainage over or through the sides and bottom during hauling. No boulders, broken concrete, or other similar type debris shall be disposed of in the disposal area(s). For disposal of this type of debris, see paragraph "Other Removed Materials" of this Section.

3.3.2 Disposal in Government-furnished Disposal Area (Required method if bid award is based upon Bidding Schedule "A"))

3.3.2.1 Confined Disposal Facility (CDF) Disposal

The following requirements pertain to projects utilizing a Government-furnished CDF.

a. Conveyance Method. The dredged material shall be conveyed into the CDF, as further described in these specifications, by an approved method; however, the method of conveying the dredged material to the disposal facility shall be such as to prevent the loss of any water or material into the area outside the facility. The Contractor shall not be permitted to deposit any dredged material in the channels for the purpose of rehandling into the disposal facility. If the dredged material is transferred from scows to the CDF by bucket type equipment, provisions shall be made underneath the transfer equipment to catch drippings of water and dredged material and to prevent such water and material from escaping into the area outside of the CDF. If the material is conveyed from scows or hoppers to the disposal facility by pumping, water from outside the CDF may be used.

b. Pumpout Facilities. Written approval from the Contracting Officer is required prior to the construction of any temporary mooring or pumpout facility by the Contractor. Any temporary mooring or pumpout facility shall be removed within ten (10) days after the completion of the dredging and disposal operations of this contract unless the Contractor obtains a Department of the Army Permit to leave the structure in place. The permit would require the removal of the facility not later than the completion of the filling of the CDF. If permits are desired, applications shall be made by the Contractor within thirty (30) days after receipt of the Notice of Award.

c. Pumpout Line Inspection. The Contractor shall inspect the pumpout line for leaks at 0800 and 1600 hours each day the pumpout line is used. Any leaks shall be repaired within twenty-four (24) hours. Any leaks outside the CDF area shall require immediate shutdown of pumping operations until the pipe is repaired.

d. Dredged Material Placement. Dredged material shall be placed directly into the CDF, at the discharge location indicated on the contract drawing(s). The dredged material shall be placed directly into the indicated area(s) and shall not be re-handled in any way during the placement procedure. The Contractor shall place the dredged material in such a manner to insure positive drainage towards the weir.

The Contractor shall monitor the placement of material to prevent the development of isolated ponding areas. Placement of any dredged material within the CDF is prohibited until the placement procedure has been approved by the Contracting Officer. Any damages caused to the CDF by the Contractor's operations shall be completely repaired, to the satisfaction of the Contracting Officer, at no additional cost to the Government. Additionally, the Contractor shall adhere to the site-specific requirements specified in the Special Contract Requirements (Section 00800), clause "Physical Data."

3.3.2.2 Open-Lake Disposal

The following requirements pertain to projects utilizing a Government-furnished open-lake disposal area.

a. Procedure. The Contractor shall discharge dredged material within the disposal area as indicated on the contract drawing(s) and in accordance with any site-specific requirements specified in the Special Contract Requirements (Section 00800), clause "Physical Data." The portion of the disposal area to be used shall be plainly marked, by the Contractor, with conspicuous buoys that shall have reflective tape or markers. Materials shall only be discharged, within the disposal area, five (5) feet below the surface of the water to minimize disruption of water quality. Prior to opening its doors, the transporting vessel shall be as stationary as is safely possible over the disposal area to minimize turbidity and sediment dispersal. Washout shall be performed only as necessary and while as stationary as is safely possible over the disposal area.

b. Limits on Open-Lake Disposal. The limit of dredged material allowed to be discharged into the open-lake disposal area, as authorized under Section 404 of the Clean Water Act (33 USC 1344), is specified in the Special Contract Requirements (Section 00800), clause "Physical Data." The Contractor shall carefully monitor the discharges to assure that this quantity is not exceeded, unless notified in writing, by the Contracting Officer, that additional discharges have been authorized. Discharges of dredged material, in excess of authorized amounts, shall be considered an obstruction of a navigable waterway, in accordance with the Special Contract Requirements (Section 00800), clause "Obstruction of Navigable Waterways," and shall be removed by, or for, the Contractor, at his expense. Discharges of dredged material in excess of authorized amounts may also be considered knowing violations of the Clean Water Act and referred for appropriate enforcement action under Sections 309 and 404 of the Clean Water Act (33 USC 1319 and 1344).

c. Material Disposal Records. The Contractor shall maintain a log or record listing the date, quantity, and location of each load of dredged material placed in the open-lake disposal area, and shall maintain a track plot showing vessel displacement versus location encompassing areas in and adjacent to the disposal area, along with the name of the individual having responsibility for assuring the accuracy of the information. This information shall be submitted to the Contracting Officer on a daily basis, attached to each day's Quality Control report, in accordance with Section 01451, "CONTRACTOR QUALITY CONTROL".

3.3.2.3 Nearshore Disposal

The following requirements pertain to projects utilizing a Government-furnished nearshore disposal area.

a. Procedure. The Contractor shall discharge dredged material within the disposal area as indicated on the contract drawing(s) and in accordance with any site-specific requirements specified in the Special Contract Requirements (Section 00800), clause "Physical Data." Buoys shall be placed prior to disposal to demarcate the boundaries of the

nearshore disposal area. Dredged material shall be placed as close to shore as possible, at this location. In order to place the material as close to shore as practical, the disposal vessel shall be moved shoreward into shallower water as it is being unloaded. Individual bins in bottom dump scows shall be opened in sequence, if possible, to enhance disposal in shallower depths.

b. Vessel Cleanliness. Only clean vessels shall be used to transport dredged materials for nearshore disposal. Prior to their use, they shall be inspected and approved by the Contracting Officer and/or his Representative.

c. Material Disposal Records. The Contractor shall maintain a log or record listing the date, quantity, and location of each load of dredged material placed in the nearshore disposal area, and shall maintain a track plot showing vessel displacement versus location encompassing areas in and adjacent to the disposal area, along with the name of the individual having responsibility for assuring the accuracy of the information. This information shall be submitted to the Contracting Officer on a daily basis, attached to each day's Quality Control report, in accordance with Section 01451, "CONTRACTOR QUALITY CONTROL".

3.3.3 Disposal in Contractor-furnished Disposal Area, With Bid (Required method if bid is awarded under Bidding Schedule "B"))

3.3.3.1 Required Documents

If a Contractor-furnished area or areas are proposed, the bid shall be accompanied by a document which includes written permission of the owners of the property proposed as disposal areas and of the property involved in obtaining access to the disposal area, as well as dimensions of the area or areas proposed.

3.3.3.2 Required Forms

A form is enclosed, listed as an attachment in Section 00100, "Instructions, Conditions, and Notice to Bidders", indicating information to be submitted by the Contractor for any Contractor-furnished disposal area. All expenses incurred in connection with providing and making available such Contractor-furnished disposal areas shall be borne by the contractor, and all materials deposited therein, and all operations in connection therewith shall be at the Contractor's risk.

3.3.3.3 Coordination with Agencies

The Contractor shall coordinate on the use of the proposed Contractor-furnished disposal area with the agencies specified in the Special Contract Requirements (Section 00800), clause "Physical Data" and shall submit with his bid, written approval of these agencies for the use of the disposal area(s).

3.3.3.4 Material Placement Restrictions

The material shall be disposed of in an area enclosed by embankments or bulkheads to confine or grade the material, with necessary waste weir, provided and maintained by the Contractor, and the cost of constructing and

maintaining such enclosure shall be included in the contract unit prices. The operation of disposing of material in the disposal area(s) shall be conducted in a manner that will limit the concentration of solids discharging over the waste weir or contained in any drainage or seepage from the area to levels acceptable to State and local agencies having jurisdiction on discharges in the location of the disposal area. Suspended solids test shall be performed hourly on discharge over any waste weir or drainage or seepage from a Contractor-furnished disposal area, until a representative composite sampling frequency can be determined and agreed upon by the Contracting Officer's Representative. The suspended solids test shall be performed according to "Standard Methods For the Examination of Water and Wastewater". If these tests indicate that solids are in a concentration greater than permitted under this contract, the use of such disposal area shall be stopped immediately. Use of the Contractor-furnished disposal area shall not be resumed until the Contractor can demonstrate to the satisfaction of the Contracting Officer that he has modified his operations to such an extent that the discharge over the waste weirs or the drainage or seepage will contain solid material to acceptable concentrations. If, at any time, use of the Contractor-furnished disposal area is suspended or stopped for any reason, the Contractor shall continue operations and place all dredged material in the Government-furnished disposal area at no additional cost to the Government. The Contractor shall remove and transport dredged material in a manner as to prevent spillage into any waterway, on streets or adjacent areas. Local regulations regarding hauling and disposal apply.

3.3.4 Disposal in Contractor-furnished Disposal Area, After Award

If, after the award of the contract, the Contractor proposes a disposal area other than that stipulated in these specifications, he shall submit the document, approvals, and understandings, required by paragraphs "Required Documents", "Required Forms", and "Coordination with Agencies", to the Contracting Officer for approval. Acceptance of the proposed site may require an adjustment in the contract price, if found necessary by the Contracting Officer, to protect the interests of the Government. All expenses incurred in connection with providing and making available such disposal areas shall be borne by the Contractor, and all materials deposited thereof, and all operations in connection therewith shall be at the Contractor's risk.

3.3.5 Other Removed Materials

All tree trunks, dock timbers, old piles, boulders, and other similar type debris materials removed in connection with the dredging operations shall be disposed of ashore above the high-water mark, to the satisfaction of the Contracting Officer. The disposal area shall be obtained by the Contractor and shall comply with all Federal, State, and local regulations.

3.3.6 Misplaced Materials

Any dredged material that is deposited elsewhere than in places designated or approved by the Contracting Officer will not be paid for and the Contractor may be required to remove such misplaced material and deposit it where directed at his expense.

3.3.7 Condition of Scows, Hoppers, and Pipelines

All scows and hoppers used for transporting the dredged material shall be kept in good condition with coamings in repair. Doors of dump vessels shall be maintained in good repair and sealed in a proper manner to prevent the loss of dredged material. Decks of vessels shall be cleaned of dredged material before leaving the dredging area. Pipelines in hydraulic dredging systems shall be kept in good condition, free of leaks.

3.3.8 Unloading of Scows

When scow unloading is performed with the use of a clamshell or bucket, the disposal area enclosure shall be returned to its original condition by removing all material deposited thereon to the satisfaction of the Contracting Officer.

3.4 ALLOWANCES AND TOLERANCES

3.4.1 Overdepth

Allowable overdepth in this contract is one (1) foot below the required pay prism as shown on the contract drawing(s) and stated herein. Dredged material actually removed to maximum pay prism, as computed by the Government in accordance with paragraph "MEASUREMENT AND PAYMENT," will be paid for at the contract unit price per cubic yard.

3.4.2 Excessive Dredging

Any material removed below the overdepth allowance will be considered excessive dredging and will not be paid for.

3.4.3 Sideslopes

The Contractor is not permitted to perform maintenance dredging outside the Federal channel limits. However, sideslope material above the maximum pay prism that falls into the channel limits and is removed will be paid for.

3.4.4 Shoal Removal

Nothing herein shall be construed to prevent payment for the removal of shoals performed in accordance with the Contract Clause (Section 00700) titled "Final Examination and Acceptance" or Special Contract Requirement (Section 00800), clause "Shoaling."

3.5 DREDGING METHODS

The Contractor is not restricted from using any specific plant or equipment in the work that can satisfactorily perform the required dredging, except as indicated in the Special Contract Requirements (Section 00800), clause "Physical Data." Sediments shall be transferred from the dredge to a scow by direct release from the dredging bucket if a clamshell is used; or by pumping into a scow either adjacent to the dredge or docked along the pier, if a cutterhead is used. If an extensive pipeline is required, it shall be assembled and located to prevent or minimize effects on water quality,

navigation, and sport fishing. The Contractor shall refer to the Special Contract Requirements (Section 00800), clauses "Commencement, Prosecution, and Completion of Work" and "Physical Data" of this specification for further guidance concerning dredging operations.

3.6 LAYOUT OF WORK

The Contractor shall lay out his work from the Government-established ranges and gauges indicated on the drawings and shall be responsible for all measurements in connection therewith. The Contractor shall furnish, at his own expense, all stakes, templates, platform equipment, range markers, and labor as may be required in laying out any part of the work from the ranges and gauges established by the Government. The Contractor shall be held responsible for the execution of the work to such lines and grades as may be established or indicated by the Contracting Officer. It shall also be the responsibility of the Contractor to maintain and preserve all stakes and other marks established. The coordinates of contract limits, triangulation points, and traverse points in the vicinity of the work are available in the Operations & Readiness Branch, U.S. Army Engineer District, Buffalo, 1776 Niagara Street, Buffalo, New York 14207-3199, between the hours of 8:00 AM and 4:00 PM, Monday through Friday. This information will also be made available to the Contractor at the Pre-Construction Meeting.

-- End of Section --